

ODS 965

OBSTRUCTION DATA SHEET

ODS 965
ONTARIO INTERNATIONAL AIRPORT
ONTARIO, CALIFORNIA

DIGITIZED FROM

OC 965
SURVEYED NOVEMBER 1988
10TH EDITION



PREPARED AND DISTRIBUTED BY
THE NATIONAL OCEAN SERVICE
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FOR THE FEDERAL AVIATION ADMINISTRATION

C55.411/3:

OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

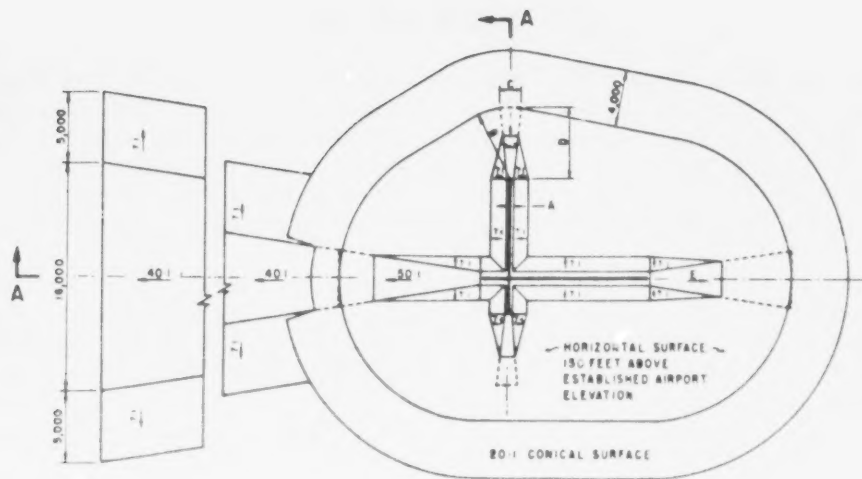
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)
2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

A(V) Utility runway - visual approach only
 A(NP) Utility runway - nonprecision instrument approach
 B(V) Nonutility runway - visual approach only
 C Nonutility runway - nonprecision instrument approach with
 visibility minimums greater than 3/4 mile
 D Nonutility runway - nonprecision instrument approach with
 visibility minimums as low as 3/4 mile
 PIR Precision instrument runway
 SUPLC ... Supplemental C underlying a B(V)

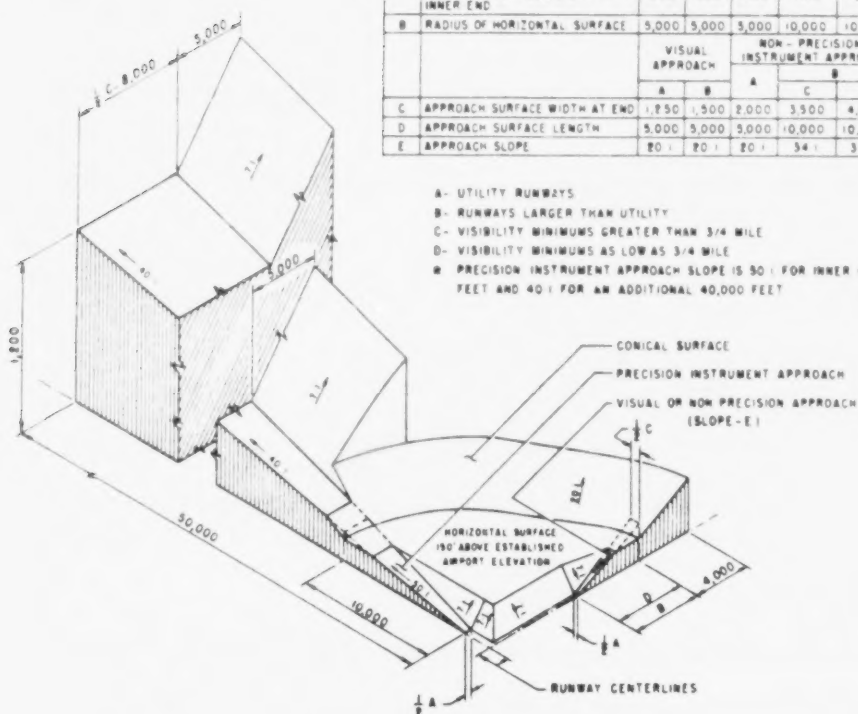
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY		PRECISION INSTRUMENT RUNWAY	
		A	B	A	C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH		PRECISION INSTRUMENT APPROACH	
		A	B	A	C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	4
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	4

- A- UTILITY RUNWAYS
 B- RUNWAYS LARGER THAN UTILITY
 C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
 D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
 E- PRECISION INSTRUMENT APPROACH SLOPE IS 30:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

X¹ X² XXXX/XXXX³

XXXXXX.XXX⁴ XXXXXXXX.XXX⁴ XXXXXXXX⁵

XXXX/XXXX⁶ XXXXXX.XXX⁷ XXXXXXXX.XXX⁷

OBJECT

XXXXXXXXXXXX
XXXXXXXXXXXX

LAT

XXXXXX.XXX
XXXXXX.XXX

LONG

XXXXXXXXXX.XXX
XXXXXXXXXX.XXX

A⁸ ELEV⁹

XX XXXX
XX XXXX

HAR¹¹

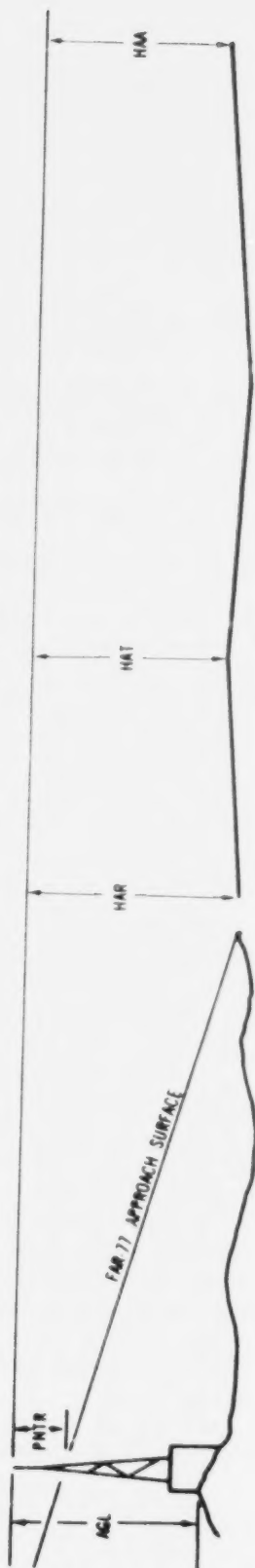
XXX
XXX

DEND¹²

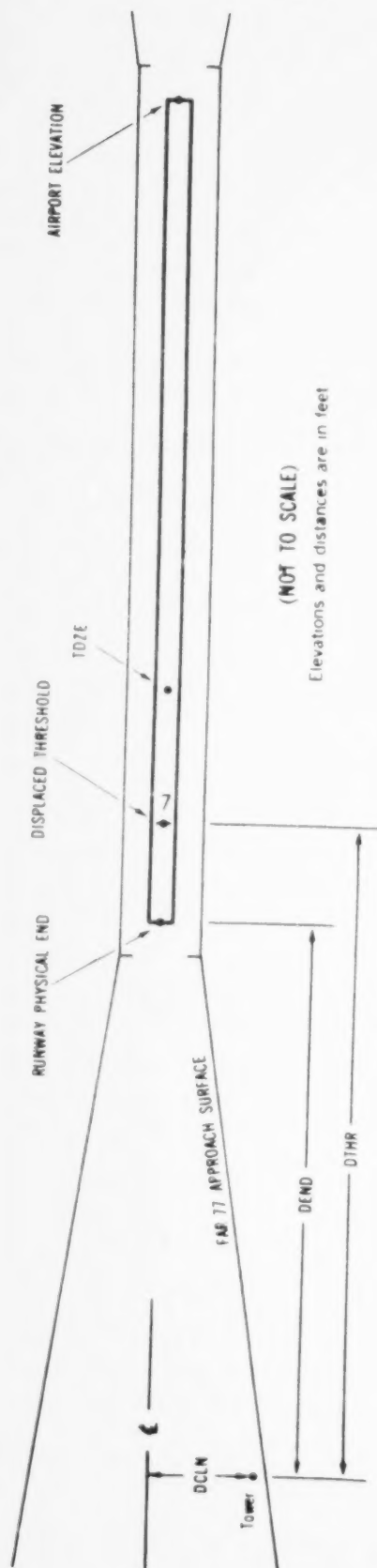
XXXX
XXXX

PNTR¹³

XXXX
XXXX



N



(NOT TO SCALE)

Elevations and distances are in feet

EXPLANATION OF FOOTNOTES

- 1 Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary area of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.
- 2 For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)
- 3 Reference runway approach physical end elevation/touchdown zone elevation
- 4 Latitude and longitude of reference runway approach physical end
- 5 Reference runway geodetic azimuth reckoned clockwise from south
- 6 Reference runway displaced threshold elevation/touchdown zone elevation
- 7 Latitude and longitude of reference runway displaced threshold
- 8 Accuracy Code:

Horizontal	Vertical
1 = 20	A = 2
2 = 40	B = 5
	C = 20
- 9 Mean Sea Level (MSL) elevation at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.
- 10 Height above ground level (AGL). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is ± 10 feet.
- 11 HAA - Height above airport
 HAR - Height above reference runway approach physical end
 HAT - Height above reference runway touchdown zone elevation
- 12 DEND - Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end
 DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway threshold
 DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft.

 A negative value for DEND or DTHR indicates object is in primary area on roll-out side of zero distance point.
- 13 PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

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AIRPORT ELEVATION 943

OBJECT	8L	PIR 942/	340324.715N	1173718.983W	2695749	943/943	340324.721N	11737 7.101W	HAA	DEND	DTHR	DCLN	PNTR
OL ON GLIDE SLOPE	340321.85	1173507.78	1A	968	26	25	25	-11040	-10040	295R	39		
GROUND	340321.59	1173520.22	1A	924	-18	-19	-19	-9993	-8993	321R	-5		
OL ON WINDSOCK	340320.52	1173531.34	1A	946	4	3	3	-9057	-8058	428R	18		
OL ON WINDSOCK	340320.09	1173643.52	1A	955	13	12	12	-2984	-1984	469R	17		
OL ON ANEMOMETER	340320.60	1173650.58	1A	953	11	10	10	-2389	-1390	417R	13		
OL GLIDE SLOPE	340329.23	1173658.96	1A	992	50	49	49	-1685	-685	455L	50		
POLE	340328.24	1173720.25	1A	955	13	12	12	107	1106	356L	13		
OL DME	340322.11	1173723.34	1A	960	18	17	17	367	1366	263R	15		
OL LOCALIZER	340324.71	1173723.49	1A	951	9	8	8	379	1379	0L	5		
WINDSOCK	340327.95	1173724.42	1A	957	15	14	14	457	1457	327L	10		
BUILDING	340323.21	1173725.42	1A	951	9	8	8	542	1542	151R	2		
LIGHT STANDARD	340330.16	1173726.73	1A	969	27	26	26	651	1651	550L	18		
RAILROAD	340318.74	1173729.74	1A	965	23	22	22	905	1905	603R	9		
VENT ON BLDG	340318.28	1173734.36	1A	969	27	26	26	1294	2294	650R	5		
RR CROSSING BARRICADE	340322.32	1173739.93	1A	989	47	46	46	1763	2762	241R	16		
TREE	340318.48	1173741.59	1A	1012	70	69	69	1902	2902	629R	36		
TREE	340321.60	1173742.74	1A	997	55	54	54	1999	2999	314R	19		
TREE	340322.14	1173746.08	1A	995	53	52	52	2280	3280	258R	11		
FLAGPOLE ON HOPPER	340315.84	1173754.22	1A	1011	69	68	68	2965	3965	895R	14		
TREE	340329.40	1173755.96	1A	1010	68	67	67	3111	4110	475L	10		
TREE	340332.81	1173802.12	1A	1013	71	70	70	3629	4629	821L	2		
TREE	340333.69	1173819.40	1A	1048	106	105	105	5083	6082	911L	8		
STACK	340326.79	1173828.56	1A	1087	145	144	144	5854	6853	214L	32		

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AIRPORT ELEVATION 943

26R PIR 930/930 340324.768N 1173453.997W 0895910

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
POLE	340328.24	1173720.25	1A	955		25	25	12	-12306		356R	13
OL ON GLIDE SLOPE	340329.23	1173658.96	1A	992		62	62	49	-10514		455R	50
OL ON ANEMOMETER	340320.60	1173650.58	1A	953		23	23	10	-9810		417L	13
OL ON WINDSOCK	340320.09	1173643.52	1A	955		25	25	12	-9215		469L	17
OL ON WINDSOCK	340320.52	1173531.34	1A	946		16	16	3	-3142		428L	18
GROUND	340321.59	1173520.22	1A	924		-6	-6	-19	-2206		321L	-5
OL ON GLIDE SLOPE	340321.85	1173507.78	1A	968		38	38	25	-1160		295L	39
OL ON LOCALIZER	340324.76	1173442.44	1A	947		17	17	4	973		1L	2
TREE	340319.76	1173428.70	1A	964		34	34	21	2129		507L	-5

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AIRPORT ELEVATION 943

8R PIR 935/935 340317.803N 1173655.212W 2695806

OBJECT	LAT	LONG	A	ELEV	ACL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
OL ON WINDSOCK	340315.52	1173505.99	1A	945		10	10	2	-9190		235R	23
OL ON GLIDE SLOPE	340321.85	1173507.78	1A	968		33	33	25	-9040		405L	46
GROUND	340321.59	1173520.22	1A	924		-11	-11	-19	-7993		379L	5
OL ON WINDSOCK	340320.52	1173531.34	1A	946		11	11	3	-7058		272L	26
POST	340312.82	1173533.33	1A	919		-16	-16	-24	-6890		506R	-1
WINDSOCK	340315.80	1173606.28	1A	925		-10	-10	-18	-4117		205R	3
BLAST FENCE	340314.02	1173626.35	1A	925		-10	-10	-18	-2428		384R	1
OL ON WINDSOCK	340320.09	1173643.52	1A	955		20	20	12	-984		231L	24
OL ON ANEMOMETER	340320.60	1173650.58	1A	953		18	18	10	-390		282L	20
POLE	340312.55	1173703.40	1A	945		10	10	2	689		531R	0
POLE	340314.15	1173713.01	1A	964		29	29	21	1498		369R	3
TREE	340315.10	1173720.63	1A	975		40	40	32	2139		272R	1
OL DME	340322.11	1173723.34	1A	960		25	25	17	2366		436L	-18
OL LOCALIZER	340324.94	1173723.52	1A	951		16	16	8	2381		723L	-28
POLE	340317.82	1173725.23	1A	965		30	30	22	2525		3L	-17
BUILDING	340323.21	1173725.42	1A	951		16	16	8	2542		548L	-31
TREE	340313.39	1173727.04	1A	1005		70	70	62	2678		445R	20
RAILROAD	340318.74	1173729.74	1A	965		30	30	22	2905		97L	-24
TREE	340314.04	1173732.35	1A	992		57	57	49	3125		378R	-2
VENT ON BUILDING	340318.28	1173734.36	1A	969		34	34	26	3294		50L	-28
TREE	340313.99	1173738.53	1A	998		63	63	55	3645		384R	-6
RR CROSSING BARRICADE	340322.32	1173739.93	1A	989		54	54	46	3762		459L	-17
TREE	340318.48	1173741.59	1A	1012		77	77	69	3902		71L	3
TREE	340321.60	1173742.74	1A	997		62	62	54	3999		386L	-14
TREE	340322.14	1173746.08	1A	995		60	60	52	4280		441L	-22
FLAGPOLE ON HOPPER	340315.84	1173754.22	1A	1011		76	76	68	4965		196R	-19
TREE	340329.40	1173755.96	1A	1010		75	75	67	5110		1175L	-23
STACK	340326.79	1173828.56	1A	1087		152	152	144	7853		914L	-1

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AIRPORT ELEVATION 943

26L PIR 924/924 340317.843N 1173453.995W 0895913

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
OL ON ANEMOMETER	340320.60	1173650.58	1A	953		29	29	10	-9810		282R	20
OL ON WINDSOCK	340320.09	1173643.52	1A	955		31	31	12	-9215		231R	24
BLAST FENCE	340314.02	1173626.35	1A	925		1	1	-18	-7771		384L	1
WINDSOCK	340315.80	1173606.28	1A	925		1	1	-18	-6082		205L	3
POST	340312.82	1173533.33	1A	919		-5	-5	-24	-3310		506L	-1
OL ON WINDSOCK	340320.52	1173531.34	1A	946		22	22	3	-3142		272R	26
GROUND	340321.59	1173520.22	1A	924		0	0	-19	-2206		379R	5
OL ON GLIDE SLOPE	340321.85	1173507.78	1A	968		44	44	25	-1160		405R	46
OL ON WINDSOCK	340315.52	1173505.99	1A	945		21	21	2	-1009		235L	23
ROD ON BUILDING	340313.62	1173445.19	1A	927		3	3	-16	741		427L	-8
TREE	340319.76	1173428.70	1A	964		40	40	21	2129		193R	1
ROCK	340210.60	1172633.46	2C	2112		1188	1188	1169	42124		6778L	190
ROCK	340216.52	1172631.04	2C	2006		1082	1082	1063	42326		6179L	79

AIRPORT ELEVATION 943

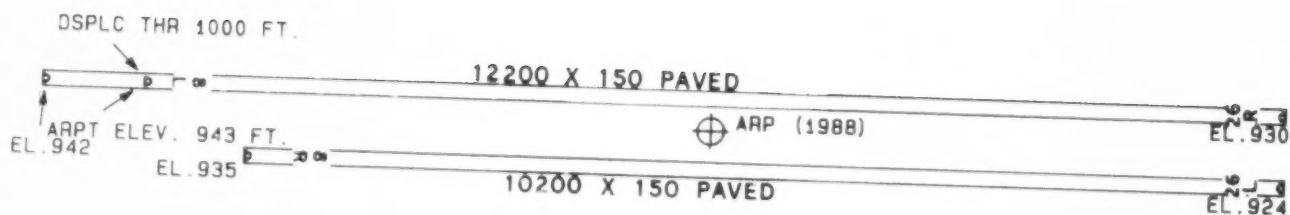
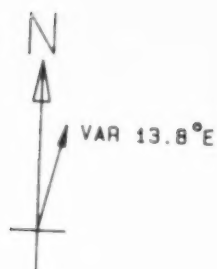
OBJECT

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0C0965 File Continued from Previous Page
AIRPORT ELEVATION 943

ARP 340321.596N 1173601.077W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
POLE	340435.97	1173826.16	1B	1148		205	287 51	14336
OL RADIO TOWER	340541.13	1173647.66	2A	1338		395	330 41	14639
TREE	340415.25	1173844.57	1B	1115		172	277 44	14786
POLE	340506.92	1173824.28	2C	1216		273	297 41	16078
ANT ON OL MCRWV T ON BLDG	340400.57	1173908.69	1B	1188		245	270 14	16269
STEEPLE	340429.63	1173858.81	2C	1156		213	280 55	16459
TRANSMISSION TOWER	340151.88	1173251.33	2C	1109		166	105 47	18363
MOUNTAIN TOP	340156.37	1172630.78	2C	2220		1277	86 20	48759



TOUCHDOWN ZONE RUNWAY ELEVATION	
8L	943
26R	930
8R	935
26L	924

ONTARIO INTERNATIONAL AIRPORT
 ONTARIO , CALIFORNIA
 (NOT TO SCALE)